

Amendments to the Abstract:

Abstract of the Disclosure

In ~~the~~ cleaning using ~~the~~ a self-propelled cleaning device, firstly the cleaning device moves alongside ~~the~~ a wall surface and then a reference direction is set. Next, the cleaning device advances alongside the wall surface ~~by~~ at a prescribed distance, makes a right-angle turn, and travels in the reference direction. When the cleaning device reaches the surface of ~~the~~ an opposing wall, it moves in a spiraling manner. At that time, the orientation angle of the cleaning device, which is estimated using a gyro sensor, is checked and corrected. If an obstacle is encountered while traveling, the cleaning device travels on a path that avoids the obstacle or travels in a spiral manner in a region in front of the obstacle.